

**BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE  
ON APPEAL TO THE BOARD OF APPEALS**

In re Application of: Cynthia Cassel )	
Robert Cassel Jr. )	Date: August 18, 2005
Serial No.: 09/767,413 )	
Filed: 01/23/01 )	Group Art Unit: 2632
Title: Combination Breathing Monitor )	
Alarm and Audio Baby Alarm )	Examiner: Toan Pham

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**CERTIFICATE OF SERVICE**

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, P.O. Box 1491, Alexandria, VA 22313

Terry Lakos  
Name: TERRY LAKOS

8/31/06  
Date

**BRIEF ON APPEAL**

Hon. Commissioner of Patents and Trademarks  
P.O. Box 1491  
Alexandria, VA 22313

Dear Sir:

This is an appeal from the Final Rejection, dated January 7, 2005 for the above identified application.

**REAL PARTY IN INTEREST**

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The party(ies) named in the caption of this brief are the real parties of interest in this appeal.

### **RELATED APPEALS AND INTERFERENCES**

This rejection was previously reversed in Appeal No. 2002-1893 on March 4, 2004 by Administrative Patent Judges Hairston, Krass and Blankenship. Appellant feels that the present issues have already been decided and that this previous decision is controlling. There are no other appeals or interferences known to appellant, appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal.

### **STATUS OF CLAIMS**

Currently pending are claims 1-11 which were all finally rejected, which is herein under appeal.

### **STATEMENT OF AMENDMENTS**

There have been no supplemental amendments filed after final rejection.

### **SUMMARY OF CLAIMED SUBJECT MATTER**

The present invention is a combination breathing monitor alarm and audio baby alarm which includes an attachable transmitter in combination with a receiver. Referring to FIG. 1-2, a combination breathing monitor alarm and audio baby alarm 10 is shown,

according to the present invention, including an attachable transmitter 12 in combination with a receiver 14. The transmitter 12 forms a main body of a linearly elongated, pliable chest strap 16 having hook and loop fastener means 18 supported at each linear end. It is anticipated that the chest strap 16 would be soft and formable, and easily wrapable about the chest of an infant in a manner that would be safe and comfortable. In this manner, the hook and loop fastener means 18 can allow for the chest strap 16 to be connected in a manner circumscribing the wearers chest. The chest strap 16 has a flat, smooth inner surface 17 supporting a first resonant sensor 19 spaced laterally apart from a second resonant sensor 20. A microphone 64 is further housed in the chest strap 16, and communicates with transmitter control circuitry housed therein, whose function will be described in greater detail below. Further, a battery housing 22 for securely storing batteries in a removable manner is provided within the chest strap 16 for providing portable electrical power for powering the transmitter control circuitry.

A receiver 14 is provided housing receiver control circuitry, as will be described in greater detail below, for receiving signals transmitted by the transmitter 12. It is anticipated that the receiver 14 will be used physically remotely from the transmitter 12, and would thereby be in wireless radio communication with the transmitter 12. It is further anticipated that a lighting means 22, shown herein as an incandescent illumination panel, would provide the functionality of a conventional "night-light" as well.

FIG. 3 shows in greater detail the transmitter control circuitry and receiver control circuitry. The transmitter control circuitry has a transmitter control central processing unit 60 including a conventional radio frequency transmitter 63 communicating with an

antenna 66 and controlled by a conventional analog to digital microphone amplification circuit 62 in communication with a microphone 64. An on/off switch 61 controls the input of electrical power to both circuits 62, 63. A receiver control central processing unit 70 including a conventional radio frequency receiver 72 communicating with an antenna 74 and controlled by a conventional digital to analog speaker amplification circuit 73 in communication with a speaker 76. An on/off switch 78 controls the input of electrical power to both circuits 72, 73.

The transmitter 12 further incorporates a respiration monitor 30 for monitoring the respiration of the user as well as interacting with the transmitter control circuitry for transmitting a respiration alarm signal. The first resonant sensor 18 and second resonant sensor 20 are anticipated as being in physical contact with the chest of an infant. It is anticipated that the first resonant sensor 18 detects respiration and/or movement of the infant, while the second resonant sensor 20 detects heart rate or pulse. Such redundancy will allow for prevention of "false" alarming should the infant move during sleep in a manner that prevents adequate communication with the sensors 18, 20. A signal processor 82 compares the respiration related signal pattern to a stored pattern, and monitors the heart rate or pulse as compared with an initial baseline measurement. A comparator circuit 84 determines if either of the measured characteristic fall below an alarm point, and generate an alarm output impulse 86 that communicates with the conventional radio frequency transmitter 63, forming an synthesized signal that communicating with an antenna 66 and results in an alarm or annunciation signal of a predetermined frequency for audible transmission through the speaker 76 of the receiver 14. In this manner, both normal, monitoring sounds as well

as the incidental alarm annunciator can be transmitted via the same transmitter/receiver combination.

### Mapping of Independent Claim

#### Claim 1

<p>A combination breathing monitor alarm and audio baby alarm comprising:</p>	<p>Referring now to FIG. 1-2, a combination breathing monitor alarm and audio baby alarm 10 is shown (Page 5, Lines 10-11)</p> <p>Shown in FIG. 1 and 2 as 10.</p>
<p>an attachable transmitter forming a main body of a linearly elongated, pliable chest strap of a soft and formable material that is easily wrapable about the chest of an infant; and</p>	<p>The transmitter 12 forms a main body of a linearly elongated, pliable chest strap 16 having hook and loop fastener means 18 supported at each linear end. (Page 5, Lines 12-14)</p> <p>Shown in FIG. 1 and 2 as 12, 16, and 18.</p>

a receiver housing receiver control circuitry for receiving signals transmitted by said transmitter.	A receiver 14 is provided housing receiver control circuitry, as will be described in greater detail below, for receiving signals transmitted by the transmitter 12. (Page 6, Lines 5-7)  Shown in FIG. 1 and 2 as 14.
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### GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The art the examiner has relied upon as the basis for various rejections include:

1. Montgieux, U.S. Patent No. ,696,307, disclosing a
2. O'Dwyer, U.S. Patent No. 5,928,157, disclosing an apnea detection device with a remote monitoring capability;
3. Teodorescu et al., U.S. Patent No. 6,011,477, disclosing an apparatus and a method for monitoring the respiration and/or movements of a subject without requiring a physical attachment to the monitored subject; and
4. Tao, U.S. Patent No. 4,862,144 disclosing a movement monitor suitable for monitoring a human's or other living organism's breathing movement.

In the Final Rejection of June 14, 2001, the Examiner rejected claims 1, 2, and 4 under 35 U.S.C. 103(a) as being unpatentable over Montgieux, The Examiner further rejected claims 3, and 6-9 under 35 U.S.C. 103(a) as being unpatentable over Montgieux, u.S. Patent No. 4,696,307, in view of Teodorescu et al , U.S. Patent No.

6,011,477. Also, the Examiner rejected claim 5 under 35 U.S.C. 103(a) as being unpatentable over Mongieux, U.S. Patent No. 4,696,307 in view of Tao, U.S. Patent No. 4,862,144. Finally, the Examiner rejected claims 10-11 under U.S.C. 103(a) as being unpatentable over Montgieux, u.S. Patent No. 4,696,307, in view of Teodorescu et al, U.S. Patent No. 6,011,477 and further in view of O'Dwyer, U.S. Patent No. 5,928,157.

### ARGUMENT

#### 1. Rejections under 35 U.S.C. 103(a)

The examiner has rejected the claims allowed on appeal due to a 'newly found reference Montgieux'; however, this references was cited in Tau, and provides no additional motivation for combination than the Tau reference. Merely interchanging one old reference with another in no way negates the fact that the grounds for rejection were all issues and references that were fully considered and decided during prosecution of this matter.

According to M.P.E.P 1214.04:

the "Examiner should never regard such a reversal [by the Board of Appeals] as a challenge to make a new search to uncover other and better references."

Further, under M.P.E.P. 1214.07 and 37 C./F.R. 1.3198:

"Cases which have been decided by the Board of Patent Appeals and Interferences will not be reopened or reconsidered by the primary examiner, except under the provisions of 1.196, without the written authority of the Commissioner, and then only for the consideration of matters not already adjudicated, sufficient cause being shown."

Therefore, in view of thorough and complete prosecution of this matter, and

further in view of the full and final determination by the Board of Appeals in complete favor of the Applicant, the applicant submits that allowance of the present application and all claims is in order and is requested, in addition to directions to the Examiner that prevent again re-opening prosecution of this application..

However, in the event that the board finds the rejections under this renewed prosecution warranted, the following argument is directed at the Final Rejection of June 14, 2001, wherein the Examiner respectfully rejected claims 1, 2, and 4 under 35 U.S.C. 103(a) as being unpatentable over Montgieux, U.S. Patent No. 4,696,307. Montgieux teaches an device for contiued detection of a child's breathing rhythm that includes "a rigid peripheral zone" and a :moveable cenetreal zone", with a electrical connector therebetwee. See Claim 1,lines 31-36. However, unlike the present invention, Montgieux fails to teach a *pliable* chest strap of a soft and *formable* material being easily wrapable about the chest of an infant. In contrast, Montgieux teaches a rigid element connected to a stiff, moveable strap. In addition, Montgieux fails to teach a first resonant sensor for detecting respiration and movement of the infant and a second resonant sensor spaced laterally apart from the first resonant sensor for detecting heart rate pulse.

Furthermore, Montgieux fails to teach a receiver comprising a lighting means.

In light of the numerous aforementioned differences between Montgieux and the claimed invention, the examiner's rejection of claims 1, 2, and 4 under 35 U.S.C. 103(a) is inappropriate.

The Examiner respectfully rejected claims 3, and 6-11 under 35 U.S.C. 103(a) as being unpatentable over Montgieux, U.S. Patent No. 5,928,157 in view of Teodorescu et

al., U.S. Patent No. 6,011,477.

The differences with respect to Montgieux have been stated above. Teodorescu et al. teaches an apparatus and a method for monitoring the respiration and/or movements of a subject without requiring a physical attachment to the monitored subject.

However, unlike the present invention, Teodorescu et al. fails to teach a second resonant sensor which detects heart rate or pulse. In contrast, Teodorescu et al. teaches a second sensor which detects the presence and/or movement of an external proximal object, such as a person or an animal.

In addition, like Montgieux, Teodorescu et al. fails to teach a receiver comprising a lighting means. Therefore, based on the aforementioned differences between Montgieux, Teodorescu et al., and the claimed invention, the Examiner's rejection of claims 3, and 6-11 under 35 U.S.C. 103(a) is inappropriate.

The Examiner respectfully further rejected claim 5 under 35 U.S.C. 103(a) as being unpatentable over Montgieux, in view of Tao, U.S. Patent No. 4,862,144.

Tao teaches a movement monitor with a visual and audible alarm suitable for monitoring a human's or other living organism's breathing movement. However, the visual alarm taught by Tao can be differentiated with the lighting means taught by the present invention. The lighting means taught by the present invention is defined as an incandescent illumination panel which functions as a night light, thereby illuminating continuously during infant sleeping periods. Tao, rather, teaches a visual alarm designed to illuminate upon cessation of movement.

Based upon the above arguments, it is felt that the differences between the present invention and all of these references are such that rejection based upon 35 U.S.C. 103, in addition to any other art, relevant or not, is also inappropriate. However, by way of additional argument application wishes to point out that it is well established at law that for a proper *prima facie* rejection of a claimed invention based upon obviousness under 35 U.S.C. 103, the cited references must teach every element of the claimed invention. Further, if a combination is cited in support of a rejection, there must be some affirmative teaching in the prior art to make the proposed combination. See Orthopedic Equipment Company, Inc. et al. v. United States, 217 USPQ 193, 199 (Fed. Cir. 1983), wherein the Federal Circuit decreed, "Monday Morning Quarter Backing is quite improper when resolving the question of obviousness." Also, when determining the scope of teaching of a prior art reference, the Federal Circuit has declared:

"[t]he mere fact that the prior art could be so modified should not have made the modification obvious unless the prior art suggested the desirability of the modification." (Emphasis added). In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

There is no suggestion as to the desirability of any modification of the references to describe the present invention. An analysis of the disclosures within the cited references fails to cite every element of the claimed invention. When the prior art references require a selective combination to render obvious a subsequent claimed invention, there must be some reason for the selected combination other than the hindsight obtained from the claimed invention itself. Interconnect Planning Corp v. Feil, 774 F.2d 1132, 227 USPQ 543 (CAFC 1985). There is nothing in the prior art or the Examiners arguments that would suggest the desirability or obviousness of making a

combination breathing monitor alarm and audio baby alarm according to the present invention. Uniroyal, Inc. v. Rudkki-Wiley Corp., 837 F.2d 1044, 5 USPQ 2d 1432 (CAFC 1988). The Examiner seems to suggest that it would be obvious for one of ordinary skill to attempt to produce the currently disclosed invention. However, there must be a reason or suggestion in the art for selecting the design, other than the knowledge learned from the present disclosure. In re Dow Chemical Co., 837 F.2d 469, 5 USPQ.2d 1529 (CAFC 1988); see also In re O'Farrell, 853 F.2d 894, 7 USPQ 2d 1673 (CAFC 1988).

The Court of Appeals for the Federal Circuit (CAFC) in its opinion in In re Fine, 837 F.2d. 1071, 1075, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988), (later upheld in In re Dance, 160 F.3d. 1339, 48 USPQ 2d. 1635 (Fed. Cir. 1998), sets forth the test of how the disclosure or teaching of references should be applied under 35 USC § 103: . Obviousness is tested by "what the combined teachings of the references would have suggested to those of ordinary skill in the art." In re Keller, 642 F.2d. 413, 425, 208 USPQ 871, 881 (CCPA 1981). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." ACS Hosp. Sys., 732 F.2d at 1577, 221 USPQ at 933. And "teachings of references can be combined only if there is some suggestion or incentive to do so". Id. Here, the prior art contains none. . . . One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."

To summarize, it appears that only in hindsight does it appear obvious to one of ordinary skill in the pertinent art to combine the present claimed and disclosed

combination of elements. To reject the present application as a combination of old elements leads to an improper analysis of the claimed invention by its parts, and instead of by its whole as required by statute. Custom Accessories Inc. v. Jeffery-Allan Industries. Inc., 807 F.2d 955, 1 USPQ 2d 1197 (CAFC 1986); In re Wright, 848 F.2d 1216, 6 USPQ 2d 1959 (CAFC 1988).

Accordingly, the reversal of the Examiner by the honorable Board of Appeals is respectfully solicited.

Respectfully submitted,

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## CLAIMS APPENDIX

The claims on appeal are as follows:

1. A combination breathing monitor alarm and audio baby alarm comprising:  
an attachable transmitter forming a main body of a linearly elongated, pliable chest strap of a soft and formable material that is easily wrapable about the chest of an infant; and  
a receiver housing receiver control circuitry for receiving signals transmitted by said transmitter.
2. The combination of Claim 1, wherein said transmitter further comprises a hook and loop fastener means to allow for the chest strap to be connected in a manner circumscribing the wearers chest.
3. The combination of Claim 1, wherein said chest strap 16 has a flat, smooth inner surface supporting a first resonant sensor spaced laterally apart from a second resonant sensor and a microphone housed with said chest strap which communicates with transmitter control circuitry housed therein.
4. The combination of Claim 1, wherein said receiver is in wireless radio communication with said transmitter.
5. The combination of Claim 1, wherein said receiver comprises a lighting means.

6. The combination of Claim 3, wherein said transmitter control circuitry has a transmitter control central processing unit including a conventional radio frequency transmitter communicating with an antenna and controlled by an analog to digital microphone amplification circuit in communication with a microphone.
7. The combination of Claim 1, wherein said receiver control circuitry comprises a receiver control central processing unit including a conventional radio frequency receiver communicating with an antenna and controlled by a digital to analog speaker amplification circuit in communication with a speaker.
8. The combination of Claim 6, wherein said transmitter further incorporates a respiration monitor for monitoring the respiration of the user as well as interacting with the transmitter control circuitry for transmitting a respiration alarm signal.
9. The combination of Claim 8, wherein said respiration monitor comprises a first resonant sensor for detecting respiration and movement of the infant a second resonant sensor for detecting heart rate and pulse.
10. The combination of Claim 9, wherein said respiration monitor further comprises a signal processor that compares the respiration related signal pattern to a stored pattern, and monitors the heart rate or pulse as compared with an initial baseline measurement.

11. The combination of Claim 10, wherein said respiration monitor comprises a comparator circuit that determines if either of the measured characteristic fall below an alarm point, and generate an alarm output impulse that communicates with the radio frequency transmitter, forming an synthesized signal that communicating with an antenna and results in an alarm or annunciation signal of a predetermined frequency for audible transmission through said speaker of said receiver.

**EVIDENCE APPENDIX**

None

**RELATED PROCEEDINGS APPENDING**

None